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**Nordstrom et al.**

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(54) **WEARABLE CAMERA SYSTEMS**

(56) **References Cited**

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U.S. PATENT DOCUMENTS

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4,298,913 A \* 11/1981 Lozar ..... A42B 3/044 362/103  
5,815,126 A \* 9/1998 Fan et al. .... 345/8  
6,056,413 A \* 5/2000 Urso ..... F21V 21/30 362/106  
6,206,543 B1 \* 3/2001 Henry ..... 362/191  
6,317,039 B1 \* 11/2001 Thomason ..... 340/505  
6,467,929 B2 \* 10/2002 Lee ..... 362/191  
6,604,837 B2 \* 8/2003 Sandberg ..... 362/191  
6,704,044 B1 \* 3/2004 Foster et al. .... 348/157  
6,717,737 B1 \* 4/2004 Haglund ..... G02B 27/017 345/7  
6,733,150 B1 \* 5/2004 Hanley ..... 362/106  
(Continued)

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FOREIGN PATENT DOCUMENTS

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GB 2251780 A \* 7/1992 ..... G03B 29/00

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OTHER PUBLICATIONS

Kim T; KR Patent Application Pub 2010-072793; "Golf hat, has awning part adhered to front end of band part that is inserted in circumference of cover, display panel displaying image photographed with camera, and mounting unit mounted on side of cover"; Jul. 2010; abstract.\*

(Continued)

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(57) **ABSTRACT**

Methods, systems, and apparatus, including computer programs encoded on a computer storage medium, for wearable camera systems. In one aspect, a hat and a camera system for the hat can be used for an interactive session with a remote user. In another aspect, the hat and camera system for the hat can be used to interact with an emergency situation routing system.

**17 Claims, 5 Drawing Sheets**

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See application file for complete search history.

